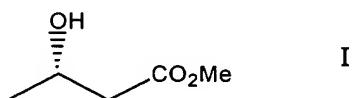


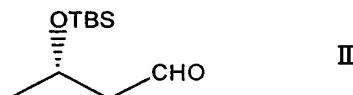
CLAIMS

1. A method for synthesizing macrosphelides, characterised by:

5 preparing methyl 3-hydroxybutyrate, expressed by formula I, as a starting material,

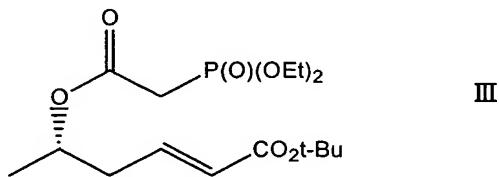


forming 3-(tert-butyldimethylsilyloxy) butylaldehyde, as expressed by formula II, by protecting hydroxyl group of the methyl 3-hydroxybutyrate, then performing reduction to alcohol, and then oxidizing the alcohol,



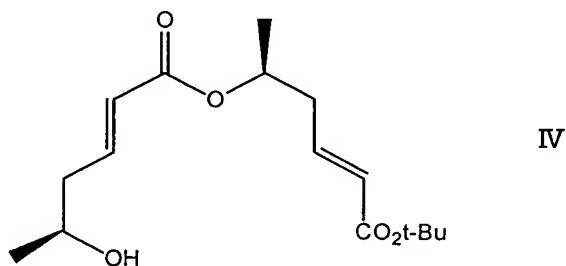
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forming tert-butyl 5-[2-(diethylphosphonyl) acetoxy] hex-2-enoate, as expressed by formula III, by reacting the aldehyde with tert-butyl diethylphosphonoacetate to give an olefin, then performing deprotection, and then dehydrating and condensing with diethylphosphonoacetic acid,

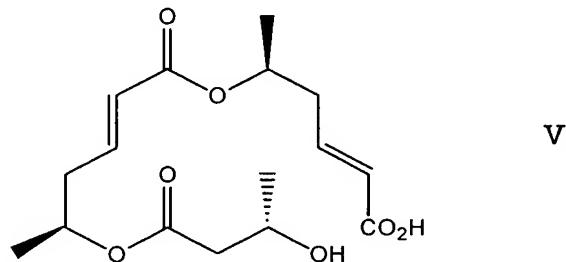


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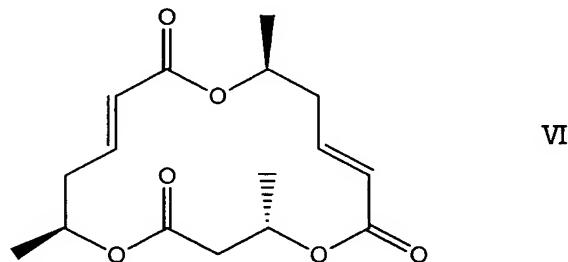
forming an alcohol, as expressed by formula IV, by reacting the compound with the aldehyde expressed by formula II to form a diester, and then performing deprotection,



forming hydroxycarboxylic acid, as expressed by formula V, by dehydrating and condensing the alcohol with 3-(tert-butyldimethylsilyloxy) butyric acid to give a triester, and then performing deprotection,



5 obtaining a macrosphelide core, as expressed by formula VI, by macrolactonization of the hydroxycarboxylic acid,



2. A method for synthesizing enantiomer of macrosphelides, characterised by:
 10 in the synthesis method according to claim 1, using a desired enantiomer for the methyl 3-hydroxybutyrate that is the starting material.

3. A method for synthesizing allylic position oxidants of macrosphelides, characterised by:
 15 oxidizing the allylic position of the macrosphelides obtained in accordance with the synthesis method according to claim 1.